

[illegible]

Human GPR56-1:	Leu	Thr	Val	His	Ala	Pro	Phe	Pro	Ala	Ala	His	Pro	Ala	Ser	Arg	Ser
Human GPR56-2:	Leu	Thr	Val	His	Ala	Pro	Phe	Pro	Ala	Ala	His	Pro	Ala	Ser	Arg	Ser
Human GPR56-3:	Leu	Thr	Val	His	Ala	Pro	Phe	Pro	Ala	Ala	His	Pro	Ala	Ser	Arg	Ser
Human GPR56-4:	Leu	Thr	Val	His	Ala	Pro	Phe	Pro	Ala	Ala	His	Pro	Ala	Ser	Arg	Ser
Murine GPR56:	Leu	Thr	<b>Ile</b>	<b>Arg</b>	Ala	Pro	Phe	<b>Leu</b>	Ala	Ala	<b>Pro</b>	<b>Asp</b>	<b>Ile</b>	<b>Pro</b>	<b>Arg</b>	<b>Phe</b>
																80
																75
																70
																65
Human GPR56-1:	Phe	Pro	Asp	Pro	Arg	Gly	Leu	Tyr	His	Phe	Cys	Leu	Tyr	Trp	Asn	Arg
Human GPR56-2:	Phe	Pro	Asp	Pro	Arg	Gly	Leu	Tyr	His	Phe	Cys	Leu	Tyr	Trp	Asn	Arg
Human GPR56-3:	Phe	Pro	Asp	Pro	Arg	Gly	Leu	Tyr	His	Phe	Cys	Leu	Tyr	Trp	Asn	Arg
Human GPR56-4:	Phe	Pro	Asp	Pro	Arg	Gly	Leu	Tyr	His	Phe	Cys	Leu	Tyr	Trp	Asn	Arg
Murine GPR56:	Phe	Pro	<b>Glu</b>	Pro	Arg	Gly	Leu	Tyr	His	Phe	Cys	Leu	Tyr	Trp	<b>Ser</b>	Arg
																95
																90
																85
Human GPR56-1:	His	Ala	Gly	Arg	Leu	His	Leu	Leu	Tyr	Gly	Lys	Arg	Asp	Phe	Leu	Leu
Human GPR56-2:	His	Ala	Gly	Arg	Leu	His	Leu	Leu	Tyr	Gly	Lys	Arg	Asp	Phe	Leu	Leu
Human GPR56-3:	His	Ala	Gly	Arg	Leu	His	Leu	Leu	Tyr	Gly	Lys	Arg	Asp	Phe	Leu	Leu
Human GPR56-4:	His	Ala	Gly	Arg	Leu	His	Leu	Leu	Tyr	Gly	Lys	Arg	Asp	Phe	Leu	Leu
Murine GPR56:	His	<b>Thr</b>	Gly	Arg	Leu	His	Leu	<b>Arg</b>	Tyr	Gly	Lys	His	Asp	<b>Tyr</b>	Leu	Leu
																110
																105
																100
Human GPR56-1:	Ser	Asp	Lys	Ala	Ser	Ser	Leu	Leu	Cys	Phe	Gln	His	Gln	Glu	Glu	Ser
Human GPR56-2:	Ser	Asp	Lys	Ala	Ser	Ser	Leu	Leu	Cys	Phe	Gln	His	Gln	Glu	Glu	Ser
Human GPR56-3:	Ser	Asp	Lys	Ala	Ser	Ser	Leu	Leu	Cys	Phe	Gln	His	Gln	Glu	Glu	Ser
Human GPR56-4:	Ser	Asp	Lys	Ala	Ser	Ser	Leu	Leu	Cys	Phe	Gln	His	Gln	Glu	Glu	Ser
Murine GPR56:	Ser	<b>Ser</b>	<b>Gln</b>	Ala	Ser	<b>Arg</b>	Leu	Leu	Cys	Phe	Gln	<b>Lys</b>	Gln	Glu	<b>Gln</b>	Ser
																125
																120
																115

FIGURE 1b

Human GPR56-1:	Leu	Ala	Gln	Gly	Pro	Pro	Leu	Ala	Thr	Ser	Val	Thr	Ser	Trp	Trp
Human GPR56-2:	Leu	Ala	Gln	Gly	Pro	Pro	Leu	Ala	Thr	Ser	Val	Thr	Ser	Trp	Trp
Human GPR56-3:	Leu	Ala	Gln	Gly	Pro	Pro	Leu	Ala	Thr	Ser	Val	Thr	Ser	Trp	Trp
Human GPR56-4:	Leu	Ala	Gln	Gly	Pro	Pro	Leu	Ala	Thr	Ser	Val	Thr	Ser	Trp	Trp
Murine GPR56:	Leu	<b>Lys</b>	Gln	Gly	<b>Ala</b>	Pro	Leu	<b>Ile</b>	Ala	Thr	Ser	<b>Ser</b>	Ser	Trp	<b>Gln</b>
		130					135				140				
Human GPR56-1:	Ser	Pro	Gln	Asn	Ile	Ser	Leu	Pro	Ser	Ala	Ala	Ser	Phe	Thr	Ser
Human GPR56-2:	Ser	Pro	Gln	Asn	Ile	Ser	Leu	Pro	Ser	Ala	Ala	Ser	Phe	Thr	Ser
Human GPR56-3:	Ser	Pro	Gln	Asn	Ile	Ser	Leu	Pro	Ser	Ala	Ala	Ser	Phe	Thr	Ser
Human GPR56-4:	Ser	Pro	Gln	Asn	Ile	Ser	Leu	Pro	Ser	Ala	Ala	Ser	Phe	Thr	Ser
Murine GPR56:	<b>Ile</b>	Pro	Gln	Asn	<b>Thr</b>	Ser	Leu	Pro	<b>Gly</b>	Ala	<b>Pro</b>	Ser	Phe	<b>Ile</b>	Ser
	145				150						155				160
Human GPR56-1:	Phe	His	Ser	Pro	Pro	His	Thr	Ala	Ala	His	Asn	Ala	Ser	Val	Asp
Human GPR56-2:	Phe	His	Ser	Pro	Pro	His	Thr	Ala	Ala	His	Asn	Ala	Ser	Val	Asp
Human GPR56-3:	Phe	His	Ser	Pro	Pro	His	Thr	Ala	Ala	His	Asn	Ala	Ser	Val	Asp
Human GPR56-4:	Phe	His	Ser	Pro	Pro	His	Thr	Ala	Ala	His	Asn	Ala	Ser	Val	Asp
Murine GPR56:	Phe	His	<b>Asn</b>	<b>Ala</b>	Pro	His	<b>Lys</b>	<b>Val</b>	<b>Ser</b>	His	Asn	Ala	Ser	Val	Asp
					165					170					175
Human GPR56-1:	Cys	Glu	Leu	Lys	Arg	Asp	Leu	Gln	Leu	Leu	Ser	Gln	Phe	Leu	Lys
Human GPR56-2:	Cys	Glu	Leu	Lys	Arg	Asp	Leu	Gln	Leu	Leu	Ser	Gln	Phe	Leu	Lys
Human GPR56-3:	Cys	Glu	Leu	Lys	Arg	Asp	Leu	Gln	Leu	Leu	Ser	Gln	Phe	Leu	Lys
Human GPR56-4:	Cys	Glu	Leu	Lys	Arg	Asp	Leu	Gln	Leu	Leu	Ser	Gln	Phe	Leu	Lys
Murine GPR56:	Cys	<b>Asp</b>	Leu	Lys	<b>Lys</b>	<b>Glu</b>	Leu	Gln	<b>Gln</b>	Leu	Ser	<b>Arg</b>	<b>Tyr</b>	Leu	<b>Gln</b>
			180							185				190	

FIGURE 1c

NOVEL G PROTEIN-COUPLED ...  
Herbert HERZOG  
CIP of USSN 09/308,696

Human GPR56-1:	Pro	Gln	Lys	Ala	Ser	Arg	Arg	Pro	Ser	Ala	Ala	Pro	Ala	Ser	Gln	Gln
Human GPR56-2:	Pro	Gln	Lys	Ala	Ser	Arg	Arg	Pro	Ser	Ala	Ala	Pro	Ala	Ser	Gln	Gln
Human GPR56-3:	Pro	Gln	Lys	Ala	Ser	Arg	Arg	Pro	Ser	Ala	Ala	Pro	Ala	Ser	Gln	Gln
Human GPR56-4:	Pro	Gln	Lys	Ala	Ser	Arg	Arg	Pro	Ser	Ala	Ala	Pro	Ala	Ser	Gln	Gln
Murine GPR56:	Pro	Gln	Lys	Ala	<b>Ala</b>	<b>Lys</b>	Arg	Pro	<b>Thr</b>	Ala	Ala	<b>Phe</b>	<b>Ile</b>	Ser	Gln	Gln
								200								205
Human GPR56-1:	Leu	Gln	Ser	Leu	Glu	Ser	Lys	Leu	Thr	Ser	Val	Arg	Phe	Met	Gly	Asp
Human GPR56-2:	Leu	Gln	Ser	Leu	Glu	Ser	Lys	Leu	Thr	Ser	Val	Arg	Phe	Met	Gly	Asp
Human GPR56-3:	Leu	Gln	Ser	Leu	Glu	Ser	Lys	Leu	Thr	Ser	Val	Arg	Phe	Met	Gly	Asp
Human GPR56-4:	Leu	Gln	Ser	Leu	Glu	Ser	Lys	Leu	Thr	Ser	Val	Arg	Phe	Met	Gly	Asp
Murine GPR56:	Leu	Gln	Ser	Leu	Glu	Ser	Lys	Leu	Thr	Ser	Val	<b>Ser</b>	Phe	<b>Leu</b>	Gly	Asp
								215								220
Human GPR56-1:	Met	Val	Ser	Phe	Glu	Glu	Glu	Asp	Arg	Ile	Asn	Ala	Thr	Val	Trp	Lys
Human GPR56-2:	Met	Val	Ser	Phe	Glu	Glu	Glu	Asp	Arg	Ile	Asn	Ala	Thr	Val	Trp	Lys
Human GPR56-3:	Met	Val	Ser	Phe	Glu	Glu	Glu	Asp	Arg	Ile	Asn	Ala	Thr	Val	Trp	Lys
Human GPR56-4:	Met	Val	Ser	Phe	Glu	Glu	Glu	Asp	Arg	Ile	Asn	Ala	Thr	Val	Trp	Lys
Murine GPR56:	<b>Thr</b>	<b>Leu</b>	Ser	Phe	Glu	Glu	Glu	Asp	<b>Val</b>	<b>Val</b>	Asn	Ala	Thr	Val	Trp	Lys
								230								240
Human GPR56-1:	Gln	Pro	Thr	Ala	Gly	Leu	Gln	Asp	Leu	His	Ile	Ser	Arg	Gln	Gln	Glu
Human GPR56-2:	Gln	Pro	Thr	Ala	Gly	Leu	Gln	Asp	Leu	His	Ile	Ser	Arg	Gln	Gln	Glu
Human GPR56-3:	Gln	Pro	Thr	Ala	Gly	Leu	Gln	Asp	Leu	His	Ile	Ser	Arg	Gln	Gln	Glu
Human GPR56-4:	Gln	Pro	Thr	Ala	Gly	Leu	Gln	Asp	Leu	His	Ile	Ser	Arg	Gln	Gln	Glu
Murine GPR56:	<b>Pro</b>	Pro	Thr	Ala	Gly	Leu	Glu	Asp	Leu	His	Ile	Ser	<b>Gln</b>	<b>Lys</b>	<b>Lys</b>	255

FIGURE 1d

5/15

NOVEL G PROTEIN-COUPLED ...  
Herbert HERZOG  
CIP of USSN 09/308,696

Human GPR56-1:	Glu	Glu	Gln	Ser	Glu	Ile	Met	Glu	Tyr	Ser	Val	Leu	Leu	Pro	Arg	Thr
Human GPR56-2:	Glu	Glu	Gln	Ser	Glu	Ile	Met	Glu	Tyr	Ser	Val	Leu	Leu	Pro	Arg	Thr
Human GPR56-3:	Glu	Glu	Gln	Ser	Glu	Ile	Met	Glu	Tyr	Ser	Val	Leu	Leu	Pro	Arg	Thr
Human GPR56-4:	Glu	Glu	Gln	Ser	Glu	Ile	Met	Glu	Tyr	Ser	Val	Leu	Leu	Pro	Arg	Thr
Murine GPR56:	Glu	Glu	Gln	Ser	Glu	<b>Val</b>	<b>Gln</b>	<b>Ala</b>	Tyr	Ser	<b>Leu</b>	Leu	Leu	Pro	Arg	<b>Ala</b>
						260		265						270		
Human GPR56-1:	Leu	Phe	Gln	Arg	Thr	Lys	Gly	Arg	Ser	Gly	Glu	Ala	Glu	Lys	Arg	Leu
Human GPR56-2:	Leu	Phe	Gln	Arg	Thr	Lys	Gly	Arg	Ser	Gly	Glu	Ala	Glu	Lys	Arg	Leu
Human GPR56-3:	Leu	Phe	Gln	Arg	Thr	Lys	Gly	Arg	Ser	Gly	Glu	Ala	Glu	Lys	Arg	Leu
Human GPR56-4:	Leu	Phe	Gln	Arg	Thr	Lys	Gly	Arg	Ser	Gly	Glu	Ala	Glu	Lys	Arg	Leu
Murine GPR56:	Val	Phe	Gln	Gln	Thr	Arg	Gly	Arg	Arg	Arg	Asp	Ala	Asp	Lys	Arg	Leu
						275		280						285		
Human GPR56-1:	Leu	Leu	Val	Val	Asp	Phe	Ser	Ser	Gln	Ala	Leu	Phe	Gln	Asp	Lys	Asn
Human GPR56-2:	Leu	Leu	Val	Val	Asp	Phe	Ser	Ser	Gln	Ala	Leu	Phe	Gln	Asp	Lys	Asn
Human GPR56-3:	Leu	Leu	Val	Val	Asp	Phe	Ser	Ser	Gln	Ala	Leu	Phe	Gln	Asp	Lys	Asn
Human GPR56-4:	Leu	Leu	Val	Val	Asp	Phe	Ser	Ser	Gln	Ala	Leu	Phe	Gln	Asp	Lys	Asn
Murine GPR56:	Leu	Val	Val	Val	Asp	Phe	Ser	Ser	Gln	Ala	Leu	Phe	Gln	Asp	Lys	Asn
						290		295						300		
Human GPR56-1:	Ser	Gln	Val	Val	Leu	Gly	Glu	Lys	Val	Leu	Gly	Ile	Val	Val	Gln	Asn
Human GPR56-2:	Ser	<b>His</b>	Val	Val	Leu	Gly	Glu	Lys	Val	Leu	Gly	Ile	Val	Val	Gln	Asn
Human GPR56-3:	Ser	Gln	Val	Val	Leu	Gly	Glu	Lys	Val	Leu	Gly	Ile	Val	Val	Gln	Asn
Human GPR56-4:	Ser	Gln	Val	Val	Leu	Gly	Glu	Lys	Val	Leu	Gly	Ile	Val	Val	Gln	Asn
Murine GPR56:	Ser	Gln	Val	Val	Leu	Gly	Glu	Lys	Val	Leu	Gly	Ile	Val	Val	Gln	Asn
						305		310						315		320

FIGURE 1e

Human GPR56-1:	Lys	Val	Ala	Asn	Leu	Thr	Glu	Pro	Val	Val	Leu	Thr	Phe	Gln	His	Gln
Human GPR56-2:	Lys	Val	Ala	Asn	Leu	Thr	Glu	Pro	Val	Val	Leu	Thr	Phe	Gln	His	Gln
Human GPR56-3:	Lys	Val	Ala	Asn	Leu	Thr	Glu	Pro	Val	Val	Leu	Thr	Phe	Gln	His	Gln
Human GPR56-4:	Lys	Val	Ala	Asn	Leu	Thr	Glu	Pro	Val	Val	Leu	Thr	Phe	Gln	His	Gln
Murine GPR56:	Lys	Val	<b>Thr</b>	Asn	Leu	<b>Ser</b>	<b>Asp</b>	Pro	Val	Val	Leu	Thr	Phe	Gln	His	Gln
					325					330						335
Human GPR56-1:	Leu	Gln	Pro	Lys	Asn	Val	Thr	Leu	Gln	Cys	Val	Phe	Trp	Val	Glu	Asp
Human GPR56-2:	Leu	Gln	Pro	Lys	Asn	Val	Thr	Leu	Gln	Cys	Val	Phe	Trp	Val	Glu	Asp
Human GPR56-3:	Leu	Gln	Pro	Lys	Asn	Val	Thr	Leu	Gln	Cys	Val	Phe	Trp	Val	Glu	Asp
Human GPR56-4:	Leu	Gln	Pro	Lys	Asn	Val	Thr	Leu	Gln	Cys	Val	Phe	Trp	Val	Glu	Asp
Murine GPR56:	<b>Pro</b>	Gln	Pro	Lys	Asn	Val	Thr	Leu	Gln	Cys	Val	Phe	Trp	Val	Glu	Asp
					340					345						350
Human GPR56-1:	Pro	Thr	Leu	Ser	Ser	Pro	Gly	His	Trp	Ser	Ser	Ala	Gly	Cys	Glu	Thr
Human GPR56-2:	Pro	Thr	Leu	Ser	Ser	Pro	Gly	His	Trp	Ser	Ser	Ala	Gly	Cys	Glu	Thr
Human GPR56-3:	Pro	Thr	Leu	Ser	Ser	Pro	Gly	His	Trp	Ser	Ser	Ala	Gly	Cys	Glu	Thr
Human GPR56-4:	Pro	Thr	Leu	Ser	Ser	Pro	Gly	His	Trp	Ser	Ser	Ala	Gly	Cys	Glu	Thr
Murine GPR56:	Pro	<b>Ala</b>	<b>Ser</b>	Ser	Ser	<b>Thr</b>	Gly	<b>Ser</b>	Trp	Ser	Ser	Ala	Gly	Cys	Glu	Thr
					355											365
Human GPR56-1:	Val	Arg	Arg	Glu	Thr	Gln	Thr	Ser	Cys	Phe	Cys	Asn	His	Leu	Thr	Tyr
Human GPR56-2:	Val	Arg	Arg	Glu	Thr	Gln	Thr	Ser	Cys	Phe	Cys	Asn	His	Leu	Thr	Tyr
Human GPR56-3:	Val	Arg	Arg	Glu	Thr	Gln	Thr	Ser	Cys	Phe	Cys	Asn	His	Leu	Thr	Tyr
Human GPR56-4:	Val	Arg	Arg	Glu	Thr	Gln	Thr	Ser	Cys	Phe	Cys	Asn	His	Leu	Thr	Tyr
Murine GPR56:	Val	<b>Ser</b>	Arg	<b>Asp</b>	Thr	Gln	Thr	Ser	Cys	<b>Leu</b>	Cys	Asn	His	Leu	Thr	Tyr
																380
																385
																390

FIGURE 1f

Human GPR56-1:	Phe	Ala	Val	Leu	Met	Val	Ser	Ser	Val	Glu	Val	Asp	Ala	Val	His	Lys
Human GPR56-2:	Phe	Ala	Val	Leu	Met	Val	Ser	Ser	Val	Glu	Val	Asp	Ala	Val	His	Lys
Human GPR56-3:	Phe	Ala	Val	Leu	Met	Val	Ser	Ser	Val	Glu	Val	Asp	Ala	Val	His	Lys
Human GPR56-4:	Phe	Ala	Val	Leu	Met	Val	Ser	Ser	Val	Glu	Val	Asp	Ala	Val	His	Lys
Murine GPR56:	Phe	Ala	Val	Leu	Met	Val	Ser	Ser	<b>Thr</b>	Glu	Val	<b>Glu</b>	Ala	<b>Thr</b>	His	Lys
	385					390						395				400
Human GPR56-1:	His	Tyr	Leu	Ser	Leu	Leu	Ser	Tyr	Val	Gly	Cys	Val	Val	Ser	Ala	Leu
Human GPR56-2:	His	Tyr	Leu	Ser	Leu	Leu	Ser	Tyr	Val	Gly	Cys	Val	Val	Ser	Ala	Leu
Human GPR56-3:	His	Tyr	Leu	Ser	Leu	Leu	Ser	Tyr	Val	Gly	Cys	Val	Val	Ser	Ala	Leu
Human GPR56-4:	His	Tyr	Leu	Ser	Leu	Leu	Ser	Tyr	Val	Gly	Cys	Val	Val	Ser	Ala	Leu
Murine GPR56:	His	Tyr	Leu	<b>Thr</b>	Leu	Leu	Ser	Tyr	Val	Gly	Cys	Val	<b>Ile</b>	Ser	Ala	Leu
				405						410						415
Human GPR56-1:	Ala	Cys	Leu	Val	Thr	Ile	Ala	Ala	Tyr	Leu	Cys	Ser	Arg	Val	Pro	Leu
Human GPR56-2:	Ala	Cys	Leu	Val	Thr	Ile	Ala	Ala	Tyr	Leu	Cys	Ser	Arg	Val	Pro	Leu
Human GPR56-3:	Ala	Cys	Leu	Val	Thr	Ile	Ala	Ala	Tyr	Leu	Cys	Ser	Arg	Val	Pro	Leu
Human GPR56-4:	Ala	Cys	Leu	Val	Thr	Ile	Ala	Ala	Tyr	Leu	Cys	Ser	Arg	---	---	---
Murine GPR56:	Ala	Cys	<b>Val Phe</b>	Thr	Thr	Ile	Ala	Ala	Tyr	Leu	Cys	Ser	Arg	---	---	---
			420						425							430
Human GPR56-1:	Pro	Cys	Arg	Arg	Arg	Lys	Pro	Arg	Asp	Tyr	Thr	Ile	Lys	Val	His	Met
Human GPR56-2:	Pro	Cys	Arg	Arg	Arg	Lys	Pro	Arg	Asp	Tyr	Thr	Ile	Lys	Val	His	Met
Human GPR56-3:	Pro	Cys	Arg	Arg	Arg	Lys	Pro	Arg	Asp	Tyr	Thr	Ile	Lys	Val	His	Met
Human GPR56-4:	---	---	---	---	Arg	Lys	Pro	Arg	Asp	Tyr	Thr	Ile	Lys	Val	His	Met
Murine GPR56:	---	---	---	---	Arg	Lys	<b>Ser</b>	Arg	Asp	Tyr	Thr	Ile	Lys	Val	His	Met
			435						440							445

FIGURE 1g

Human GPR56-1:	Leu	Leu	Leu	Ala	Val	Phe	Leu	Leu	Asp	Thr	Ser	Phe	Leu	Leu	Ser	Glu
Human GPR56-2:	Leu	Leu	Leu	Ala	Val	Phe	Leu	Leu	Asp	Thr	Ser	Phe	Leu	Leu	Ser	Glu
Human GPR56-3:	Leu	Leu	Leu	Ala	Val	Phe	Leu	Leu	Asp	Thr	Ser	Phe	Leu	Leu	Ser	Glu
Human GPR56-4:	Leu	Leu	Leu	Ala	Val	Phe	Leu	Leu	Asp	Thr	Ser	Phe	Leu	Leu	Ser	Glu
Murine GPR56:	Leu	Leu	Ser	Ala	Val	Phe	Leu	Leu	Asp	Val	Ser	Phe	Leu	Leu	Ser	Glu
																460
																455
																450
Human GPR56-1:	Pro	Val	Ala	Leu	Thr	Gly	Ser	Glu	Ala	Gly	Cys	Arg	Ala	Ser	Ala	Ile
Human GPR56-2:	Pro	Val	Ala	Leu	Thr	Gly	Ser	Glu	Ala	Gly	Cys	Arg	Ala	Ser	Ala	Ile
Human GPR56-3:	Pro	Val	Ala	Leu	Thr	Gly	Ser	Glu	Ala	Gly	Cys	Arg	Ala	Ser	Ala	Ile
Human GPR56-4:	Pro	Val	Ala	Leu	Thr	Gly	Ser	Glu	Ala	Gly	Cys	Arg	Ala	Ser	Ala	Ile
Murine GPR56:	Pro	Val	Ala	Leu	Thr	Gly	Ser	Glu	Ala	Ala	Cys	Arg	Thr	Ser	Ala	Met
																465
																470
																475
																480
Human GPR56-1:	Phe	Leu	His	Phe	Ser	Leu	Leu	Leu	Thr	Cys	Leu	Ser	Trp	Met	Gly	Leu
Human GPR56-2:	Phe	Leu	His	Phe	Ser	Leu	Leu	Leu	Thr	Cys	Leu	Ser	Trp	Met	Gly	Leu
Human GPR56-3:	Phe	Leu	His	Phe	Ser	Leu	Leu	Leu	Thr	Cys	Leu	Ser	Trp	Met	Gly	Leu
Human GPR56-4:	Phe	Leu	His	Phe	Ser	Leu	Leu	Leu	Thr	Cys	Leu	Ser	Trp	Met	Gly	Leu
Murine GPR56:	Phe	Leu	His	Phe	Ser	Leu	Leu	Leu	Ala	Cys	Leu	Ser	Trp	Met	Gly	Leu
																485
																490
																495
Human GPR56-1:	Gly	Tyr	Asn	Leu	Tyr	Arg	Leu	Val	Val	Glu	Val	Phe	Gly	Thr	Tyr	Val
Human GPR56-2:	Gly	Tyr	Asn	Leu	Tyr	Arg	Leu	Val	Val	Glu	Val	Phe	Gly	Thr	Tyr	Val
Human GPR56-3:	Gly	Tyr	Asn	Leu	Tyr	Arg	Leu	Val	Val	Glu	Val	Phe	Gly	Thr	Tyr	Val
Human GPR56-4:	Gly	Tyr	Asn	Leu	Tyr	Arg	Leu	Val	Val	Glu	Val	Phe	Gly	Thr	Tyr	Val
Murine GPR56:	Gly	Tyr	Asn	Leu	Tyr	Arg	Leu	Val	Val	Glu	Val	Phe	Gly	Thr	Tyr	Val
																500
																505
																510

FIGURE 1h



Human GPR56-1:	Pro Gly Tyr Leu Leu Lys Leu Ser Ala Met Gly Trp Gly Phe Pro Ile	
Human GPR56-2:	Pro Gly Tyr Leu Leu Lys Leu Ser Ala Met Gly Trp Gly Phe Pro Ile	
Human GPR56-3:	Pro Gly Tyr Leu Leu Lys Leu Ser Ala Met Gly Trp Gly Phe Pro Ile	
Human GPR56-4:	Pro Gly Tyr Leu Leu Lys Leu Ser Ala Met Gly Trp Gly Phe Pro Ile	
Murine GPR56:	Pro Gly Tyr Leu Leu Lys Leu Ser <b>Ile Val</b> Gly Trp Gly Phe Pro <b>Val</b>	525
		520
		515
Human GPR56-1:	Phe Leu Val Thr Leu Val Ala Leu Val Asp Val Asp Asn Tyr Gly Pro	
Human GPR56-2:	Phe Leu Val Thr Leu Val Ala Leu Val Asp Val Asp Asn Tyr Gly Pro	
Human GPR56-3:	Phe Leu Val Thr Leu Val Ala Leu Val Asp Val Asp Asn Tyr Gly Pro	
Human GPR56-4:	Phe Leu Val Thr Leu Val Ala Leu Val Asp Val Asp Asn Tyr Gly Pro	
Murine GPR56:	Phe Leu Val Thr Leu Val Ala Leu Val Asp Val Asp Asn Tyr Gly Pro	540
		535
		530
Human GPR56-1:	Ile Ile Leu Ala Val His Arg Thr Pro Glu Gly Val Ile Tyr Pro Ser	
Human GPR56-2:	Ile Ile Leu Ala Val His Arg Thr Pro Glu Gly Val Ile Tyr Pro Ser	
Human GPR56-3:	Ile Ile Leu Ala Val His Arg Thr Pro Glu Gly Val Ile Tyr Pro Ser	
Human GPR56-4:	Ile Ile Leu Ala Val His Arg Thr Pro Glu Gly Val Ile Tyr Pro Ser	
Murine GPR56:	Ile Ile Leu Ala Val <b>Arg</b> Arg Thr Pro Glu <b>Arg</b> Val <b>Thr</b> Tyr Pro Ser	550
		545
		555
Human GPR56-1:	Met Cys Trp Ile Arg Asp Ser Leu Val Ser Tyr Ile Thr Asn Leu Gly	
Human GPR56-2:	Met Cys Trp Ile Arg Asp Ser Leu Val Ser Tyr Ile Thr Asn Leu Gly	
Human GPR56-3:	Met Cys Trp Ile Arg Asp Ser Leu Val Ser Tyr Ile Thr Asn Leu Gly	
Human GPR56-4:	Met Cys Trp Ile Arg Asp Ser Leu Val Ser Tyr Ile Thr Asn Leu Gly	
Murine GPR56:	Met Cys Trp Ile Arg Asp Ser Leu Val Ser Tyr <b>Val</b> Thr Asn Leu Gly	570
		565
		575

FIGURE 1i

Human GPR56-1:	Leu Phe Ser Leu Val Phe Leu Phe Asn Met Ala Met Leu Ala Thr Met	580
Human GPR56-2:	Leu Phe Ser Leu Val Phe Leu Phe Asn Met Ala Met Leu Ala Thr Met	585
Human GPR56-3:	Leu Phe Ser Leu Val Phe Leu Phe Asn Met Ala Met Leu Ala Thr Met	590
Human GPR56-4:	Leu Phe Ser Leu Val Phe Leu Phe Asn Met Ala Met Leu Ala Thr Met	
Murine GPR56:	Leu Phe Ser Leu Val Phe Leu Phe Asn <b>Leu</b> Ala Met Leu Ala Thr Met	585
		590
Human GPR56-1:	Val Val Gln Ile Leu Arg Leu Arg Pro His Thr Gln Lys Trp Ser His	
Human GPR56-2:	Val Val Gln Ile Leu Arg Leu Arg Pro His Thr Gln Lys Trp Ser His	
Human GPR56-3:	Val Val Gln Ile Leu Arg Leu Arg Pro His Thr Gln Lys Trp Ser His	
Human GPR56-4:	Val Val Gln Ile Leu Arg Leu Arg Pro His Thr Gln Lys Trp Ser His	
Murine GPR56:	Val Val Gln Ile Leu Arg Leu Arg Pro His <b>Ser</b> Gln <b>Asn</b> Trp <b>Pro</b> His	595
		600
		605
Human GPR56-1:	Val Leu Thr Leu Leu Gly Leu Ser Leu Val Leu Gly Leu Pro Trp Ala	
Human GPR56-2:	Val Leu Thr Leu Leu Gly Leu Ser Leu Val Leu Gly Leu Pro Trp Ala	
Human GPR56-3:	Val Leu Thr Leu Leu Gly Leu Ser Leu Val Leu Gly Leu Pro Trp Ala	
Human GPR56-4:	Val Leu Thr Leu Leu Gly Leu Ser Leu Val Leu Gly Leu Pro Trp Ala	
Murine GPR56:	Val Leu Thr Leu Leu Gly Leu Ser Leu Val Leu Gly Leu Pro Trp Ala	610
		615
		620
Human GPR56-1:	Leu Ile Phe Phe Ser Phe Ala Ser Gly Thr Phe Gln Leu Val Val Leu	
Human GPR56-2:	Leu Ile Phe Phe Ser Phe Ala Ser Gly Thr Phe Gln Leu Val Val Leu	
Human GPR56-3:	Leu Ile Phe Phe Ser Phe Ala Ser Gly Thr Phe Gln Leu Val Val Leu	
Human GPR56-4:	Leu Ile Phe Phe Ser Phe Ala Ser Gly Thr Phe Gln Leu Val Val Leu	
Murine GPR56:	Leu <b>Val</b> Phe Phe Ser Phe Ala Ser Gly Thr Phe Gln Leu Val <b>Ile</b> Leu	625
		630
		635
		640

FIGURE 1j

Human GPR56-1:	Tyr	Leu	Phe	Ser	Ile	Ile	Thr	Ser	Phe	Gln	Gly	Phe	Leu	Ile	Phe	Ile
Human GPR56-2:	Tyr	Leu	Phe	Ser	Ile	Ile	Thr	Ser	Phe	Gln	Gly	Phe	Leu	Ile	Phe	Ile
Human GPR56-4:	Tyr	Leu	Phe	Ser	Ile	Ile	Thr	Ser	Phe	Gln	Gly	Phe	Leu	Ile	Phe	Ile
Human GPR56-5:	Tyr	Leu	Phe	Ser	Ile	Ile	Thr	Ser	Phe	Gln	Gly	Phe	Leu	Ile	Phe	Ile
Murine GPR56:	Tyr	Leu	Phe	Ser	Ile	Ile	Thr	Ser	<b>Tyr</b>	Gln	Gly	Phe	Leu	Ile	Phe	<b>Leu</b>
					645					650						655
Human GPR56-1:	Trp	Tyr	Trp	Ser	Met	Arg	Leu	Gln	Ala	Arg	Gly	Gly	Pro	Ser	Pro	Leu
Human GPR56-2:	Trp	Tyr	Trp	Ser	Met	Arg	Leu	Gln	Ala	Arg	Gly	Gly	Pro	Ser	Pro	Leu
Human GPR56-3:	Trp	Tyr	Trp	Ser	Met	Arg	Leu	Gln	Ala	Arg	Gly	Gly	Pro	Ser	Pro	Leu
Human GPR56-4:	Trp	Tyr	Trp	Ser	Met	Arg	Leu	Gln	Ala	Arg	Gly	Gly	Pro	Ser	Pro	Leu
Murine GPR56:	Trp	Tyr	Trp	Ser	Met	Arg	<b>Phe</b>	Gln	Ala	<b>Gln</b>	Gly	Gly	Pro	Ser	Pro	Leu
					660					665						670
Human GPR56-1:	Lys	Ser	Asn	Ser	Asp	Cys	Ala	Arg	Leu	Pro	Ile	Ser	Ser	Gly	Ser	Thr
Human GPR56-2:	Lys	Ser	Asn	Ser	Asp	Ser	Ala	Arg	Leu	Pro	Ile	Ser	Ser	Gly	Ser	Thr
Human GPR56-3:	Lys	Ser	Asn	Ser	Asp	Ser	Ala	Arg	Leu	Pro	Ile	Ser	Ser	Gly	Ser	Thr
Human GPR56-4:	Lys	Ser	Asn	Ser	Asp	Ser	Ala	Arg	Leu	Pro	Ile	Ser	Ser	Gly	Ser	Thr
Murine GPR56:	Lys	<b>Asn</b>	Asn	Ser	Asp	Ser	Ala	<b>Lys</b>	Leu	Pro	Ile	Ser	Ser	Gly	Ser	Thr
					675											685
Human GPR56-1:	Ser	Ser	Ser	Ser	Arg	Ile										
Human GPR56-2:	Ser	Ser	Ser	Ser	Arg	Ile										
Human GPR56-3:	Ser	Ser	Ser	Ser	Arg	Ile										
Human GPR56-4:	Ser	Ser	Ser	Ser	Arg	Ile										
Murine GPR56:	Ser	Ser	Ser	Ser	Arg	Ile										
																690

FIGURE 1k

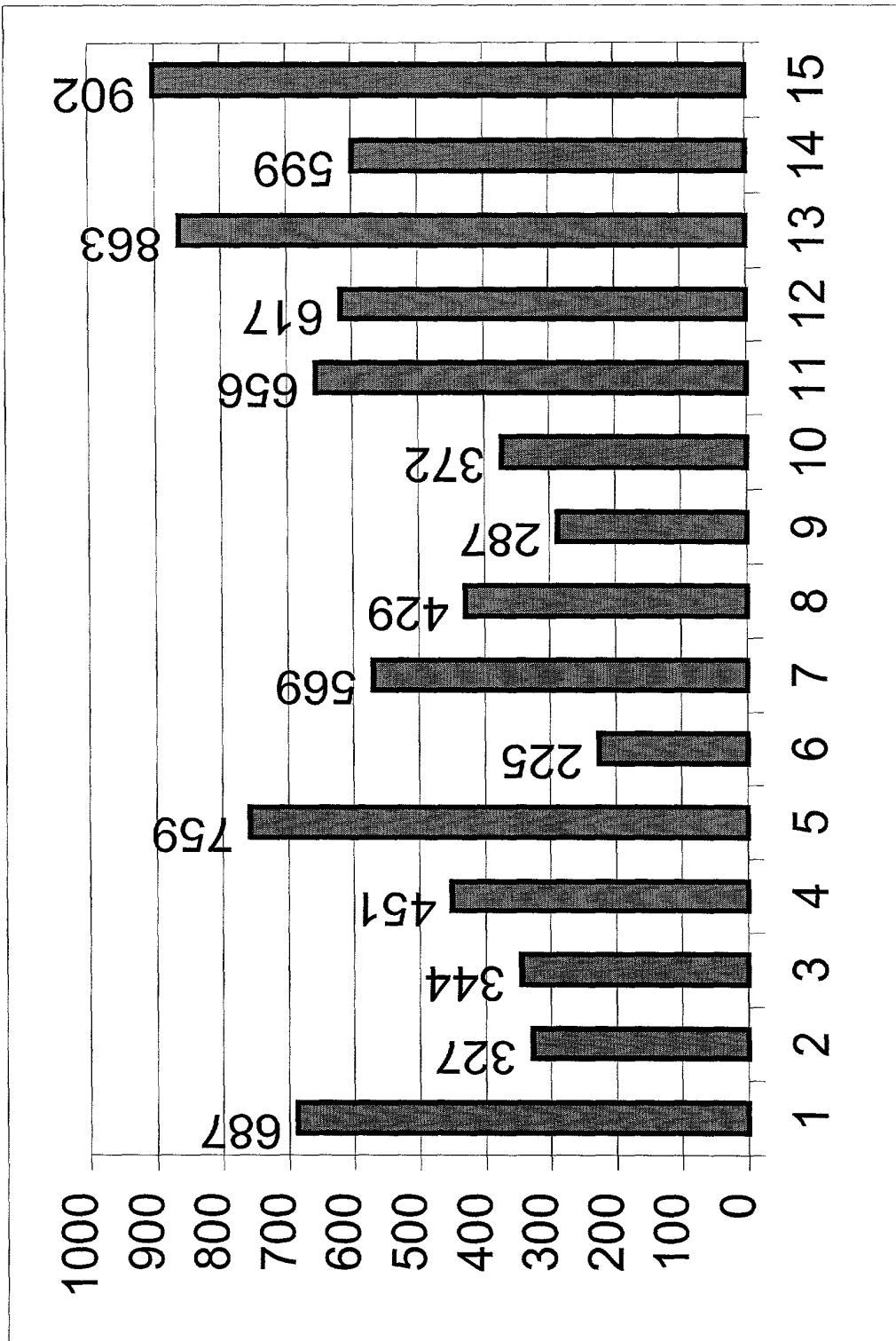


FIGURE 2a

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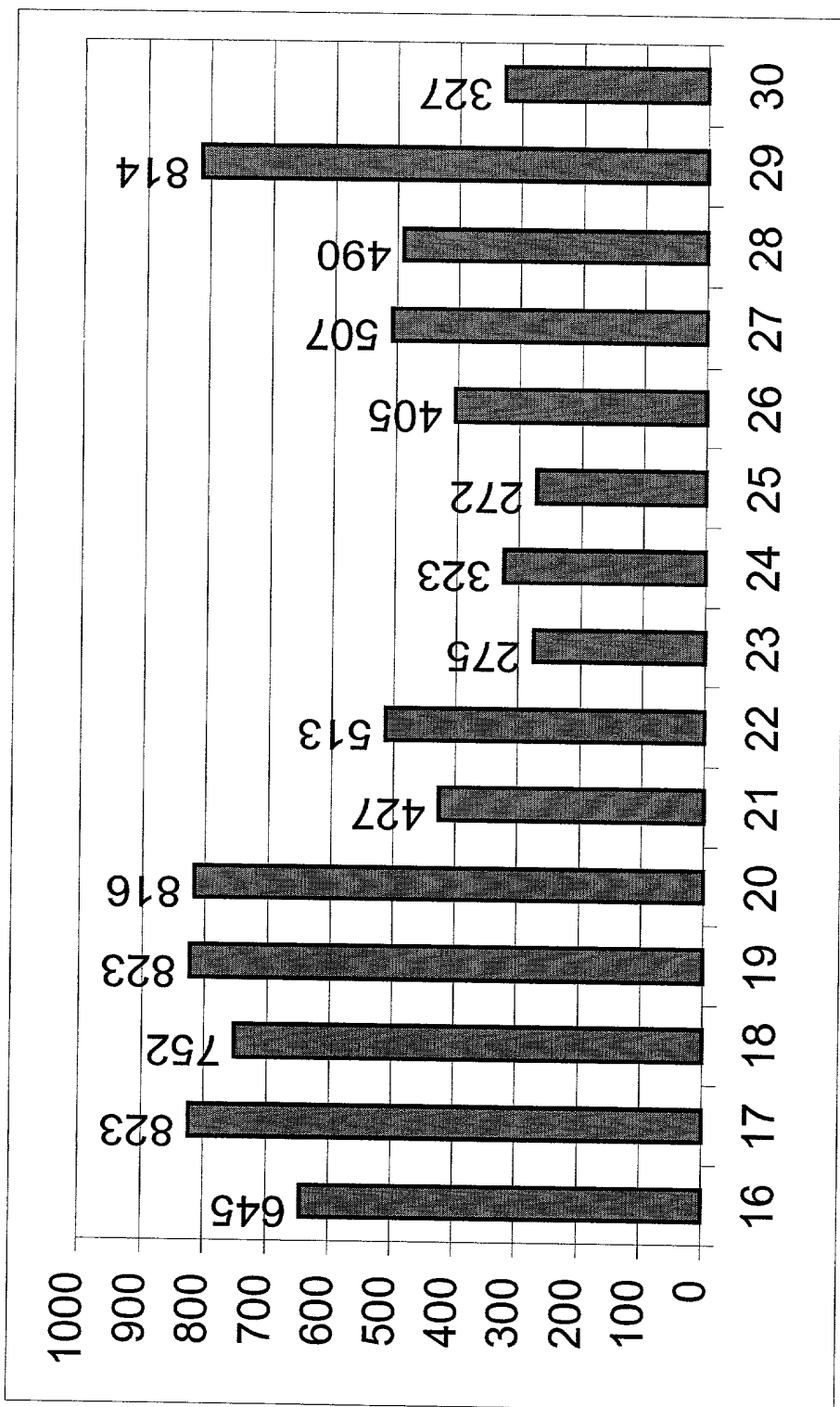


FIGURE 2b

FIG. 2b

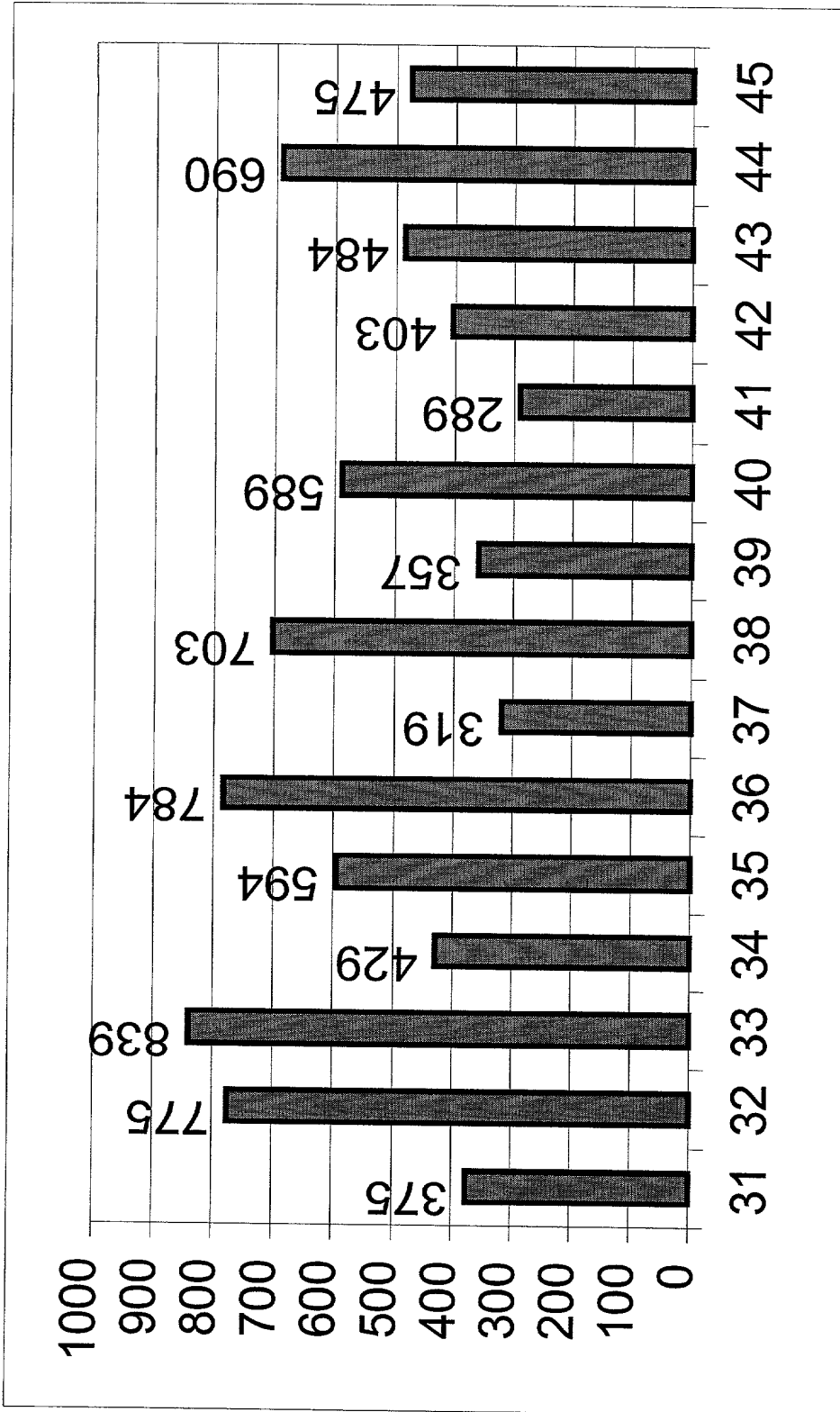


FIGURE 2c

att 400000

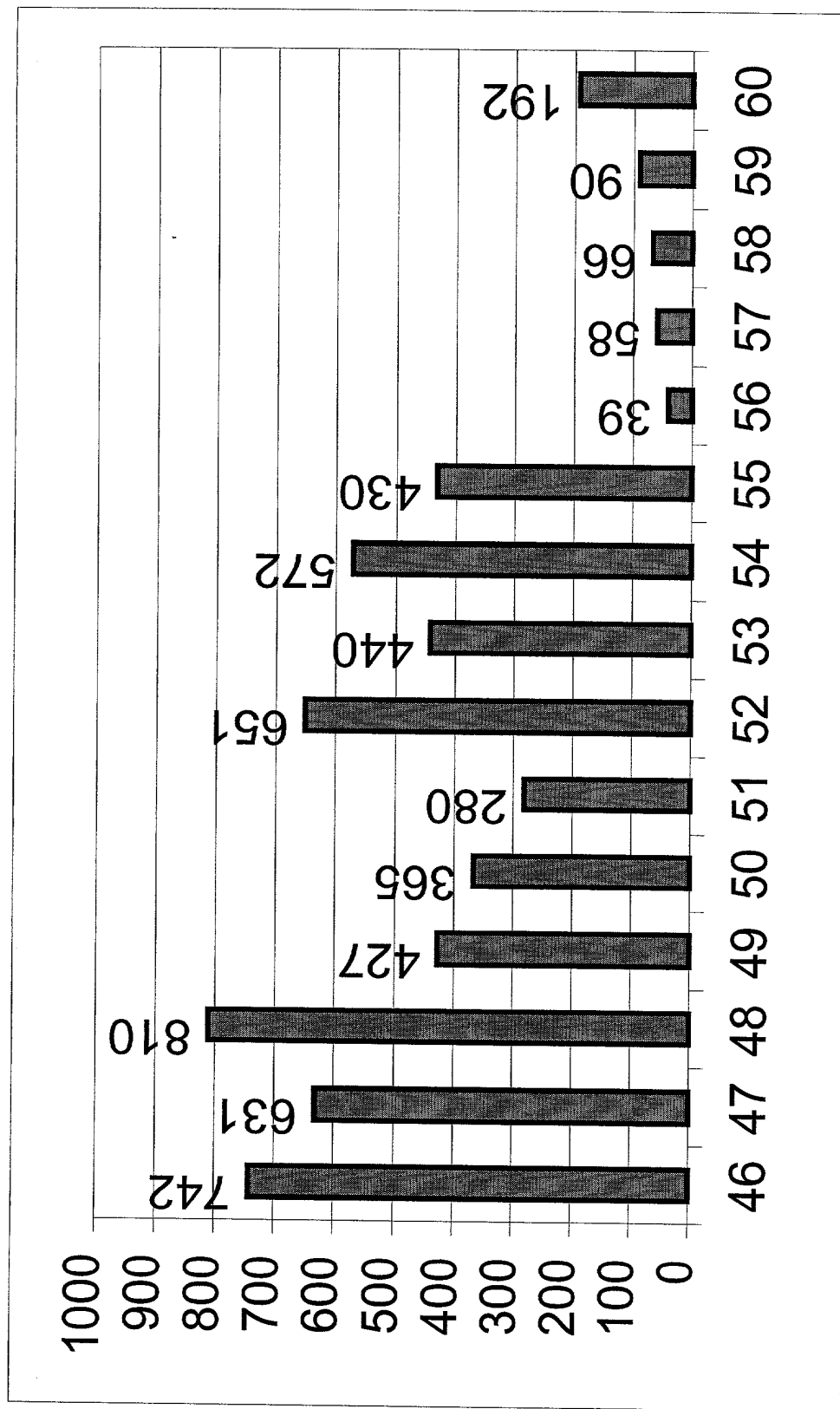


FIGURE 2d